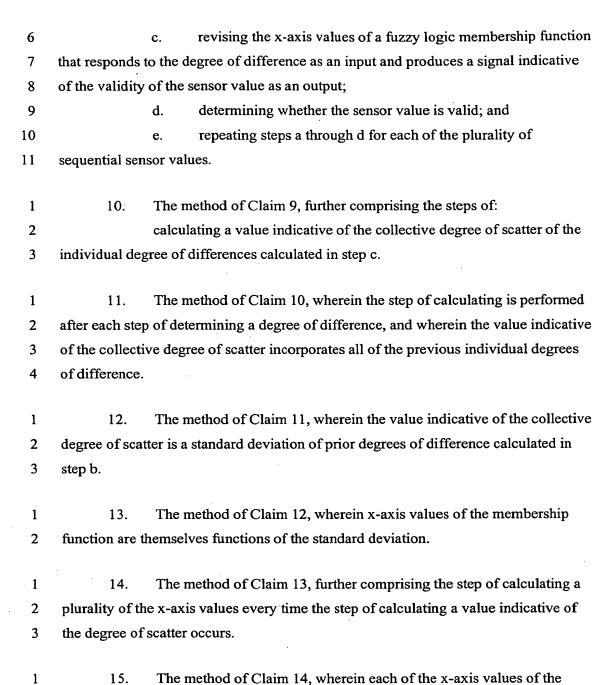
WHAT IS CLAIMED IS:

1	1.	A method for determining the validity of a sensor signal including the	
2	steps of:		
3		providing a sensor signal from a sensor;	
4		providing an estimated sensor signal;	
5		determining the difference between the sensor signal and the estimated	
6	sensor signal;		
7		calculating a standard deviation of the difference;	
8		scaling the points of inflection of a fuzzy logic membership function	
9	proportional to the standard deviation; and		
10		processing the sensor signal using the fuzzy logic membership function	
11	to determine	whether the sensor signal is valid or not.	
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1	2.	The method of Claim 1, wherein the step of processing occurs before	
2	the step of sca	aling.	
1	3.	The method of Claim 1, wherein the step of scaling occurs before the	
2	step of proces	ssing.	
	4		
1	4.	The method of Claim 1, wherein the fuzzy logic membership function	
2	, -		
3	as acceptable	, and at least one domain that evaluates a sensor signal as unacceptable.	
1	5.	The method of Claim 4, wherein the step of scaling includes the step of	
2	multiplying a	a plurality of points of inflection of the fuzzy logic membership function	
3	by the standa	rd deviation.	
1	6.	A method for determining the quality of a sensor signal in a fuzzy	
2	logic control	ler including the steps of:	
3		providing a first cumulative scatter value indicative of a cumulative	
4	degree of dif	ference between a plurality of sensor signal values and estimated sensor	
5	signal values corresponding to each of the sensor signal values;		
6		providing a fuzzy logic membership function in which the x-axis	
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7	values of the points of inflection of a plurality of fuzzy logic domains are derived		
8	from the first cumulative scatter value;		
9	retrieving a further sensor signal value;		
10	comparing the further sensor signal value with a further estimated		
11	sensor signal value;		
12	calculating a further scatter value indicative of the individual degree of		
13	difference between the further sensor signal value and the further estimated sensor		
14	signal value;		
15	combining the further scatter value with the first cumulative scatter		
16	value to provide a second cumulative scatter value indicative of the cumulative degree		
17	of difference and the individual degree of difference in combination; and		
18	amending the fuzzy logic membership function such that the x-axis		
19	values of the points of inflection of the plurality of fuzzy logic domains are derived		
20	from the second cumulative scatter value.		
1	7. The method of Claim 6, wherein the step of providing a first		
2	cumulative value includes the steps of:		
3	a. calculating a first difference between a first of the plurality of		
4	sensor signal values and a first of the estimated sensor signal values;		
5	b. calculating a second difference between a second of the		
6	plurality of sensor signal values and a second of the estimated sensor signal values;		
7	and		
8	c. calculating the first cumulative scatter value from at least the		
9	foregoing first and second differences.		
1	8. The method of Claim 7, wherein the first cumulative scatter value is a		
2	function of the standard deviation of the first and second differences.		
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1	9. A method of individually determining whether a plurality of sequentia		
2	sensor values are valid comprising the steps of:		
3	a. reading a sensor value;		
4	b. determining a degree of difference between the sensor value		
5	and an estimated sensor value;		

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points of inflection are associated with a value that is a function of the collective

degree of scatter.

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